THE UNITED STATES DISTRICT COURT FOR THE MIDDLE DISTRICT OF PENNSYLVANIA

TAMMY KITZMILLER, et al.,	
Plaintiffs,	Case No. 04-CV-2688 (Hon. Judge Jones)
V.	
DOVER AREA SCHOOL DISTRICT and	DEFENDANTS PROPOSED
DOVER AREA SCHOOL DISTRICT) FINDINGS OF FACT
BOARD OF DIRECTORS,) AND CONCLUSIONS OF
) LAW
Defendants.	

PART SEVEN

- 654. ID cannot be rule out of science because it takes issue with methodological naturalism. v. 27 (Fuller); p. 98:7–14.
- 655. There is no evidence that practicing scientists see a commitment to methodological naturalism as integral to their actual scientific work. v. 27 (Fuller); p. 98:19.
- 656. The mere openness of IDT to causation deemed "supernatural" in terms of current knowledge does not disqualify ID from science. v. 27 (Fuller); p. 98:20–p. 99:23.
- 657. The mere openness of IDT to causation deemed "supernatural" in terms of current knowledge does disqualify ID from science on the grounds that ID is not testable. v. 27 (Fuller); p. 103:9–24.
- 658. ID does not necessarily rely upon causation deemed "supernatural" in light of current knowledge. v. 27 (Fuller); p. 103:25–104:7.
- 659. ID is not nonscience simply because it might call for a scientific revolution or change in the ground rules of science as currently conceived. v. 27 (Fuller); p. 39:11–p. 50:17.
- 660. Mendel's genetic theory represents a scientific revolution and Mendels genetics provided the basis for the so-called neo-Darwinian synthesis in biology. v. 27 (Fuller); p. 44:p. 47:17.

- 661. There is reason to believe that ET has accumulated a set of anomalies that may be a harbinger of a scientific revolution in the area of the biological sciences. v. 27 (Fuller); p. 50:18–p. 54:4.
- 662. There is reason to believe that proponents of ET overstate its importance in science. v. 27 (Fuller); p. 54:5–p. 59:15.¹
- 663. ID proponents are making inroads in terms of advancing design claims as a lingua franca for science. v. 27 (Fuller); p. 74:21–p. 75:21.
- 664. A scientific theory does not become less scientific because it serves as a "big tent" for a number of subdisciplines which may be divided along lines of adherence to a variety of theoretical claims. v. 27 (Fuller); p. 61:25–p. 74:20.

Intelligent Design Is Science When Seen in Light of the Natural Sciences, More Specifically, Biology.

- 665. Intelligent design is science. v. 18 (Behe); 86:1-5; 112:3-25-114:1-6; 134:1-13; v. 37 (Minnich); 45:5-9; 48:6-25-52:1-10.
- logical inferences. v. 18 (Behe); 89:20-25; 90:1-5; v. 18 (Behe); 112:1-10; v. 37 (Minnich); 45:5-9; 48:6-25-52:1-10.

¹Please note that Dr. Fuller's testimony from p. 59:15 [beginning at "But I checked into this....] through p. 60:8. Is not cited or relied upon by Defendants as that additional inquiry was conducted by Dr. Fuller after he drafted his expert report.

- 667. Scientists who support intelligent design, such as Dr. Michael Behe and Dr. Scott Minnich, do so because of what the scientific evidence shows, not because they have any religious objections to Darwin's theory of evolution or any religious commitment to intelligent design. v. 18 (Behe); 29:4-25-30:1-3; v. 37 (Minnich); 21:1-25-22:1-20. Dr. Michael Behe is an expert in the fields of biochemistry, intelligent design, evolution and Creationism. D 249; v. 18 (Behe): 22:2-36:25; v. 18 (Behe): 83:10-85:18. Dr. Scott Minnich is an expert in the fields of microbiology, intelligent design, evolution and science education. D 247; v. 37 (Minnich): 42:10-13, 44:22-25; v. 37 (Minnich): 6:25-8:1.
- 668. It is not the goal of intelligent design advocates, such as Dr. Behe and Dr. Minnich, to stop the teaching of evolution in biology classes. v. 18 (Behe); 56:25-57:1-3; v. 37 (Minnich); 40:15-20.
- 669. Dr. Behe authored a book on intelligent design called *Darwin's Black Box:*The Biochemical Challenge to Evolution, in which he made scientific arguments in favor of intelligent design. v. 18 (Behe); 28:1-6; 32:10-25-33:1-16.
- 670. *Darwin's Black Box* has sold over 200,000 copies and has been translated into more than 10 languages. v. 18 (Behe); 28:7-13.

- 671. *Darwin's Black Box* was reviewed and critiqued by scientists. v. 18 (Behe); 33:24-25-34:1-18; 35:13-18.
- 672. Dr. Behe published articles in response to criticisms made about the arguments he advanced in *Darwin's Black Box.* v. 18 (Behe); 35: 21-25-36:1-15; D 203-H.
- 673. It is common practice within the scientific community for scientists to publish their scientific ideas in books, as Dr. Behe has done with *Darwin's Black Box.* v. 18 (Behe); 36:16-25-44:1; D 300-A, B, C, D.
- 674. Dr. Behe has published an article appearing in a peer-reviewed science journal making intelligent design arguments. v. 18 (Behe); 44:7-25-45:1-20; D 203-J.
- 675. Peer review actually means subjecting one's scientific ideas to the open scrutiny and criticism of one's colleagues and competitors in the field. v. 2 (Miller) 80: 21-25; v. 18 (Behe); 57:6-12.
- 676. Intelligent design arguments have been subjected to peer review. v. 18 (Behe); 57:13-25-70:1.
- 677. Intelligent design proponents have published peer-reviewed articles in science journals that provide support for intelligent design arguments. v. 37 (Minnich); 24:6-13; 27:12-18.

- 678. Dr. Behe has presented his scientific arguments for intelligent design to numerous academic groups. v. 18 (Behe); 57:21-25-70:1-9; D 300 E, F, G, H, I.
- design to an introductory biology class at Cornell University because the professor, a strong advocate of Darwinian evolution, wanted students in the class to hear an alternative view so that they could better make up their minds which they thought was more accurate. v. 18 (Behe); 67:22-25; 68:1-12, 20-23.
- 680. Dr. Behe presented his scientific arguments for intelligent design in the Spring of 2005 at a seminar held at Dover High School. v. 18 (Behe); 70:15-18.
- 681. Specified complexity is a concept that is part of the argument for intelligent design. v. 17 (Padian); 92:6-11.
- 682. Intelligent design proponent Dr. William Dembski, who holds a Ph.D. in mathematics from the University of Chicago, has advanced the concept of specified complexity, which he wrote about in a book called *The Design Inference*, which was published by Cambridge University Press as part of a

- monograph series with the academic editorial board at Cambridge University. v. 17 (Padian); 92:6-14; 93:23-25-94:1-18.
- 683. The argument for intelligent design consists of the following: we infer design when we see that parts appear to be arranged for a purpose; the strength of the inference is quantitative; the appearance of design in aspects of biology is overwhelming, and since nothing other than intelligent causes has been demonstrated to yield such a strong appearance of design, the conclusion that the design seen in life is real design is rationally justified. v. 18 (Behe); 90:17-25-91:1-9; v. 37 (Minnich); 50:7-22.
- 684. Anything that can be observed or measured is amenable to scientific investigation. v.1 (Miller); 62:9-11.
- 685. Everything in science is open to critical examination, replication, peer review, and discussion by other scientists. v. 1 (Miller); 60:9-11.
- 686. Scientists do not prove things, they seek to collect data sufficient to confirm or refute a hypothesis. v. 1 (Miller); 65:24-66:1-7; 92:11-16.
- 687. Intelligent design employs the scientific method of inductive reasoning. v. 18 (Behe); 106: 21-25-110:1-7; v. 19 (Behe); 54:16-25-55:1-20.
- 688. Intelligent design makes a positive argument for design. v. 18 (Behe); 109: 8-25-112:1-2.

- 689. Intelligent design employs the scientific method of inductive reasoning similar to how that scientific method is employed by paleontologists. v. 18 (Behe); 90:7-16; 103:6-13.
- 690. Paleontologists, for example, are essentially reconstructing the life of the past by accumulating data concerning patterns and then trying to infer processes that account for the change of life through time. It is based on comparative evidence. v. 17 (Padian); 54:9-19.
- 691. Paleontologists, for example, know what the function of the feathers of different shapes are in birds today, and they look at those same structures in pre-historic fossil animals and then infer that the feathers were used for a similar purpose in the fossil animal. v. 17 (Padian); 54:20-25-55:1-6.
- 692. Paleontologists, for example, infer that the hair-like feathers found on prehistoric fossils were used for insulation based on what we know about hair and feathers and insulation today. v. 17 (Padian); 55:7-21.
- 693. Paleontologists employ scientific reasoning in that they make reasoned inferences based on comparative evidence. v. 17 (Padian); 55:22-25-56:1-3.
- 694. Intelligent design employs the scientific method of inductive reasoning similar to how that method was employed in the Big Bang Theory. v. 18 (Behe); 114:14-25-116:1-8.

- 695. It is a standard scientific practice for scientists to point to the scientific literature, to point to observations and experiments that have been done by other people and other laboratories, have been peer reviewed, have been published, and to cite to that evidence, cite to those data, and cite to those experiments in their arguments. v. 3 (Miller); 42:23-25-43:1-8; v. 18 (Behe); 112:11-20; v. 37 (Minnich); 24:14-25-25:1.
- 696. This is what intelligent design proponents have done in presenting their arguments for intelligent design. v. 18 (Behe); 112:11-23; v. 37 (Minnich); 24:14-25-25:1-7.
- 697. From a scientific perspective, the question is not whether scientists have done experiments in their own laboratory that have produced evidence for a particular claim. The question is whether or not the inferences that they draw from that data are supported. v. 3 (Miller); 43:9-23; v. 18 (Behe); 113:11-22; v. 37 (Minnich); 25:8-25-27:1-11.
- 698. This is what intelligent design proponents have done in presenting their arguments for intelligent design. v. 18 (Behe); 114:1-3; v. 37 (Minnich); 26:22-25-27:1-11.
- 699. Dr. Minnich does experimental work that supports intelligent design. v. 37 (Minnich); 27:8-11; D 301-K, L.

- 700. Scientists, such as Dr. Minnich, incorporate intelligent design into their research and experimental work. v. 37 (Minnich); 10:20-25; 99:18-25-110:1; D 301-K, L.
- 701. The mainstay technique of modern biology has made use of the concept of irreducible complexity. v. 37 (Minnich); 100:13-15; D 301-K, L.
- 702. Design principles work in the laboratory because the molecular systems that scientists, such as Dr. Minnich, work on are irreducibly complex. v. 37 (Minnich); 109:21-25-110:1.
- 703. Applying design principles in the laboratory can have practical benefit, such as helping scientists develop novel vaccines. v. 37 (Minnich); 116:21-25-117:1-19; 118: 18-22.
- 704. Dr. Miller does not apply natural selection to his experimental work. v. 2 (Miller); 84:22-25-85:1.
- 705. Scientists acknowledge the appearance of design in nature. v. 3 (Miller); 37:20-24; v. 18 (Behe); 95:13-25-105:1-4; v. 37 (Minnich); 68:22-25-87:1-16; D 203-C; D 253.
- 706. There is overwhelming evidence of design in nature. v. 18 (Behe); 104:3-25-105:1-4.

- 707. One of the best examples of design in nature is the bacterial flagellum. v. 18 (Behe); 91:18-25-94:1-3; D 203-B; v. 37 (Minnich); 52:11-16; 53:6-25-57:1-8; D 300-J, K, L, M; D 301-B.
- 708. For over the last 10 years, the focus of Dr. Minnich's research and experimental work has been on the bacterial flagellum and the type three secretory systems. v. 37 (Minnich); 9:22-25-10:1-14; 18:4-11; 53:24-25-54:1-6.
- 709. There are many biological examples of design in nature, including the bacterial flagellum, other macromolecular machines in the cell, the ATPase, the information storage system of the cell, DNA polymerase, and the gated portal. v. 37 (Minnich); 52:11-16; 53:6-25-57:1-8; 68:23-25-87:1-16; D 253; D 203-C; D 301-C, D, E, F, G, H, I, J.
- 710. Intelligent design makes testable, scientific claims. v. 18 (Behe); 124:14-25-129:1-15; v. 37 (Minnich); 45:10-15; 118:23-25-120:1-13; D 203-H.
- 711. Intelligent design is falsifiable. v. 18 (Behe); 124:14-25-129:1-15; v. 37 (Minnich); 118:23-25-120:1-13; D 203-H.
- 712. Proponents of intelligent design do not dispute the "baby steps" of natural selection—they acknowledge that the Darwinian mechanism of natural selection can explain some things in life; however, it is the new major

- adaptive types and new molecular systems that are the focus of the dispute. v. 19 (Behe); 100:21-25-102:1-9; v. 20 (Behe); 74:4-8.
- 713. Irreducible complexity is a testable, scientific claim of intelligent design. v. 3 (Miller); 35:4-8; 36:10-18.
- 714. Irreducible complexity is an argument against Darwin's theory of evolution.
 v. 3 (Miller); 36:19-24; v. 19 (Behe); 54:21-25-69:1-22.
- 715. An argument against irreducible complexity is not an argument against design and more importantly it is not an argument in favor of Darwinian evolution. v. 20 (Behe); 102:14-25-106:1-12.
- 716. Darwinism can only be positively supported by convincing demonstrations that it is capable of building the machinery of the degree of complexity found in life. In the absence of such convincing demonstrations, it is rationally justified to think that design is correct. v. 20 (Behe); 103:3-19.
- 717. Dr. Behe modified his definition of irreducibly complex to address a criticism, as scientists often do with their theories. v. 19 (Behe); 57:17-25-59:1-15.
- 718. Darwin acknowledged that irreducible complexity is an argument against his theory of natural selection, stating, "If it could be demonstrated that any complex organ existed which could not possibly have been formed by

- numerous successive slight modifications, my theory would absolutely break down." v. 3 (Miller); 35:19-25-36:1-24; v. 19 (Behe); 55:17-25-56:1-15.
- 719. Dr. Kenneth Miller acknowledges that irreducible complexity is an argument against Darwin's theory of natural selection, stating in *Finding Darwin's God*, "If Darwinism cannot explain the interlocking complexity of biochemistry, then it is doomed." v. 3 (Miller) 35:10-16; 36:10-24; v. 19 (Behe); 56:16-22.
- 720. The bacterial flagellum is a marvelous machine. v. 2 (Miller); 10:1-3; D 274; D 301-D.
- 721. The bacterial flagellum is irreducibly complex. v. 19 (Behe); 64:11-25-102:1-13; v. 37 (Minnich); 110:2-25-117:1-12; D 254; D 300-Q, R, S, T; D 301-M.
- 722. Irreducible complexity applies to the molecular level because in biology the molecular level is where changes are taking place and it is the level where we can identify the components of the system. v. 19 (Behe); 63:15-25-64:1-2.
- 723. Natural selection cannot account for complex biological systems. v. 19
 (Behe); 54:1-25-121:1-4; v. 20 (Behe); 3:20-25-49:1; 72:5-25-81:1-11; v.

- 37 (Minnich); 95:17-25-98:1-11; D 300-Q, R, S, T, DD, EE, FF, GG, HH, II, JJ, KK, LL, MM, NN, OO, PP, QQ, RR, SS, TT, UU.
- 724. A person trained as a scientist should have an understanding of what qualifies as science and how the scientific method works. v. 2 (Miller); 59:25-59:1-4.
- 725. Dr. Michael Behe, a biochemist, is a scientist and a member of the scientific community. v. 2 (Miller) 59:12-22.
- 726. Dr. Michael Behe is an advocate for intelligent design because it is science.
 v. 18 (Behe); 29:14-25-30:1-3.
- 727. Dr. Scott Minnich, a microbiologist, is a scientist and a member of the scientific community. v. 2 (Miller): 59:23-25-60:1-9.
- 728. Dr. Scott Minnich is an advocate for intelligent design because it is science. v. 37 (Minnich); 21:5-24.
- 729. In an article published by the scientific journal cell, Dr. Bruce Alberts, the former president of the National Academy of Sciences, suggests that new modern biologists ought to take courses in engineering so they can understand the intricacies of the machines we find in cells. v. 2 (Miller); 90:22-25-91:1; v. 18 (Behe); 100:11-25-101:1-14; D 253; D 301-C.

- 730. There could be a force that is unsuspected in nature at a time, such as thermonuclear fusion, the force that powers the sun, and through further scientific development may actually be a natural explanation. v. 3 (Miller); 20:15-19.
- 731. Francis Crick, a Nobel laureate, put forth a natural, scientific claim called directed panspermia, which holds that the first appearance of life on earth might have been the result of the actions of beings from another planet, scattering life into the world. v. 3 (Miller) 25:12-25-27:1-9.
- 732. NASA's program, SETI, the search for extraterrestrial intelligence, is a scientific exploration seeking a natural cause explanation. v. 3 (Miller); 27:10-24.
- 733. Because we presently may not have a plausible natural explanation for a phenomenon is not the same thing as saying that we have ruled out all natural explanations for it. v. 3 (Miller); 28:1-10.
- 734. A central argument of intelligent design is that the evolutionary mechanism of natural selection is not sufficient to explain the origin of complex biological structures such as the flagellum. v. 3 (Miller); 35:4-8.

- 735. There is a bias in the scientific community against publishing intelligent design articles in science journals. v. 18 (Behe); 53:11; v. 37 (Minnich); 27:19-21; 28:3-7.
- 736. The term "theory" is used in many senses in the science community. v. 19 (Behe); 4:6-25-10:1-7; 14:11-25-17:1-25...
- 737. Even using the National Academy of Sciences definition of theory does not mean that a theory is almost certainly right. v. 19 (Behe); 5:7-15.
- 738. Even a well accepted theory can nevertheless be inaccurate and turn out to be not only wrong, but utterly imaginary, such as the ether theory of the propagation of light. v. 19 (Behe); 9:11-23.
- 739. The cell contains a collection of protein machines. v. 2 (Miller):87:6-8; D 203-C; D 253; D 301-C.
- 740. We think of the machines that we build in the human world as composed of a number of parts to achieve a particular end. In the cell, there are many assemblies of proteins and other components where the parts interact and a particular result comes out of this. v. 2 (Miller); 89:18-23.
- 741. Intelligent design theory continues to advance and has done so since *Pandas* was published in 1993. v. 17 (Padian); 103:23-25-104:1-3; v. 18 (Behe); 56:3-4; v. 37 (Minnich); 23:13-17.

- 742. Intelligent design does not rule out a natural cause explanation for the design found in nature. v. 20 (Behe); 100:2-18; v. 37 (Minnich); 136:17-25-137:1-4.
- 743. Methodological naturalism is a constraint on all science because it limits possible conclusions that science can come to. v. 20 (Behe); 100:22-25-102:1.
- 744. Despite the constraints of methodological naturalism, intelligent design still fits within its framework. v. 20 (Behe); 102:2-25-104:1-25; v. 37 (Minnich); 137:14-20.

Intelligent Design Is Not Creationism or Religion, Nor Does it Advance a Religious Belief.

- 745. Intelligent design is not Creationism or religion, nor does it advance a religious belief. v. 20 (Behe); 93:17-25-100:1-18; v. 37 (Minnich); 46:3-12; 127:22-25-128:1-5.
- 746. Intelligent design does not require the action of a supernatural creator acting outside of the laws of nature. v. 18 (Behe); 86:16-20; v. 20 (Behe); 99:1-24; v. 37 (Minnich); 45:22-25-46:1-2; 135:18-21.
- 747. A creationist can simply be any person who believes in an act of creation. v. 3 (Miller); 62:25-63:1-4; v. 20 (Behe); 92:7-25-93:1.

- 748. Just because a scientist makes a statement does not mean that the statement was intended to be scientific. v. 3 (Miller); 89:6-8.
- 749. Saying that two schools of thought embrace a single idea does not mean that those two schools of thought are exactly the same thing. v. 3 (Miller); 34:23-25-35:1-3.
- 750. One need not be a fundamental Christian to be a proponent of intelligent design. v. 3 (Miller); 29:18-21.
- 751. It is important to define what one means by Creationism. In the current usage in the United States, a creationist is taken to mean someone who thinks that the earth is six to ten thousand years old, that all living organisms were simultaneously created during a very brief period of time, perhaps six days, and that the entire geologic record is an illusion, a column of flood deposition from the single forty day flood that has been misinterpreted for 250 years by the geological sciences. v. 3 (Miller); 69:21-22; 70:6-14; v. 20 (Behe); 93:1-11.
- 752. Intelligent design does not require adherence to the six-day creation event found in the Book of Genesis. v. 15 (Alters); 35:2-5; v. 20 (Behe); 98:15-17; v. 37 (Minnich); 134:10-15.

- 753. Intelligent design does not require adherence to the belief that the earth is no more than 6,000 to 10,000 years old. v. 20 (Behe); 98:18-21; v. 37 (Minnich); 134:16-25-135:1.
- 754. Adherents of young earth Creationism are unequivocal that the earth has to be between six and ten thousand years old. v. 3 (Miller); 30:24-25-31:1-10.
- 755. Intelligent design does not require adherence to the flood geology point of view advanced by creationists. v. 15 (Alters); 35:6-9; v. 20 (Behe); 98:22-25; v. 37 (Minnich); 135:2-13.
- 756. Intelligent design does not depend on any religious faith. v. 15 (Alters); 35:16-18; v. 20 (Behe); 96:7-13.
- 757. Intelligent design is not dependent on the Bible to reach its conclusions. v. 15 (Alters); 35: 19-21; v. 20 (Behe); 96:4-9; 97:1-24.
- 758. Intelligent design is not dependent on Sacred Scripture to reach its conclusions. v. 15 (Alters); 35:22-24; v. 20 (Behe); 96:4-9; 97:1-24.
- 759. The conclusion that something was designed does not require knowledge of a designer. v. 18 (Behe); 94:4-16; v. 37 (Minnich); 57:9-18.
- 760. Intelligent design does not say who the designer was. v. 15 (Alters); 35:25-36:1-2; v. 20 (Behe); 99:1-23; v. 37 (Minnich); 57:9-18.

- 761. Intelligent design does not hold that the designer is God. v. 18 (Behe); 94:17-20; v. 37 (Minnich); 57:19-25.
- 762. Creation science was an attempt by certain Christians to explain Bible stories or to find scientific evidence for Bible stories or explain them in scientific terms, that is, to attempt to justify them on scientific grounds. v. 16 (Padian); 72:19-25.
- 763. Intelligent design does not have as its objective to validate Bible stories or any particular religious or creation stories. v. 16 (Padian) 73:1-3.
- 764. Intelligent design is not a religious belief nor does it advance religion or a religious belief. v. 18 (Behe); 87:11-15; v. 20 (Behe); 96:14-25; v. 37 (Minnich); 133:4-25-135:1-17.

Intelligent Design Theory, like the Big Bang Theory Is a Scientific Theory.

- 765. The Big Bang Theory is based on observable, empirical facts plus logical inferences and employs inductive reasoning similar to intelligent design. v. 18 (Behe); 114:14-25-116:1-8.
- 766. We do not have a common experience of a universe exploding, yet scientists reasoned based on our common experience of explosions that the universe

- came into existence by way of the "big bang" explosion. v. 18 (Behe); 115:3-22.
- 767. Intelligent design employs scientific reasoning based on common experience to conclude that the design seen in nature is real design, similar to the scientific reasoning employed by the Big Bang Theory. v. 18 (Behe); 116:13-25-117:1-3.
- 768. The fact that science cannot presently tell us the source of the bang in the Big Bang Theory is similar to how science cannot presently tell us the source of the design found in nature. v. 18 (Behe); 116: 13-25-117:1-2.
- 769. Similar to intelligent design, the Big Bang Theory was and continues to be controversial not because of the scientific data, but because some people, including scientists, thought that it had philosophical and even theological implications. v. 18 (Behe); 117:3-25-123:1-10.
- 770. Similar to the Big Bang Theory, intelligent design can bracket the question of cause and proceed on other issues within the theory. v. 18 (Behe); 122:15-25-123:1-125.

Scientists and Other Academics Are Discussing and Debating Intelligent Design in Scientific and Academic Circles and Publications.

- 771. Scientists and other academics debate and discuss intelligent design at various academic symposia and conferences held at various academic institutions and by various scientific organizations. v. 18 (Behe); 57:21-25-70:1-9.
- 772. There is a scientific debate regarding intelligent design and evolution, as evidenced by the conferences and symposia attended by Dr. Michael Behe and the published books and articles debating design. v. 19 (Behe); 48:12-25-54:1-5.
- 773. Scientists and other academics debate and discuss intelligent design in publications by prestigious academic institutions and their presses such as Cambridge University Press, MIT, and Michigan State Press. v. 2 (Miller); 64:1-25-65:1-7; v. 18 (Behe); 77:17-25-79:1-6; 81:18-25-82:1-11; 203-I.
- 774. The American Museum of Natural History, the publisher of *Natural History*, published a debate amongst scientists and academic on intelligent design. v. 18 (Behe); 79:16-25-80:1-4.

- 775. Dr. Behe has responded to criticisms about the concept of irreducible complexity in an article published in *Philosophy of Science*, a very prestigious journal in the field. v. 18 (Behe); 80:13-25-81:1-6; D 203-J.
- 776. Dr. Behe has responded to his critics in an article published in the journal *Biology and Philosophy*. D 203-H.
- 777. The New York Times has asked Dr. Behe, on three occasions, to submit articles for publication that discuss his ideas on intelligent design. v. 18 (Behe); 82:12-20.
- 778. Dr. Miller has published several writings addressing claims advanced by intelligent design proponents, including Dr. Behe's claims, using scientific evidence to do so. v. 2 (Miller); 66:5-13; 67:4-8; 67:9-25.
- 779. Dr. Miller wrote a scientific critique of Dr. Behe's book, *Darwin's Black Box*, based on Dr. Miller's understanding of the scientific literature. v. 2 (Miller); 82:17-25-83:1-2.
- 780. Scientists have published peer-reviewed articles in scientific journals making arguments in support of intelligent design.
- 781. Dr. Miller has debated intelligent design proponents, including Dr. Behe, at places such as Concordia College in Wisconsin and the American Museum of Natural History in New York, in which he was presenting scientific

- arguments against intelligent design and Dr. Behe was presenting scientific arguments in support of intelligent design. v. 2 (Miller); 69:24-25-70:1-19.
- 782. Dr. Miller debated Dr. Behe in print in *Natural History* magazine. v. 2 (Miller); 75:13-16.
- 783. According to Dr. Miller, the editors of *Natural History* decided that there was enough interest among their readership in intelligent design that they invited three intelligent design proponents to submit articles and they invited three scientist, including Dr. Miller, to respond. v. 2 (Miller); 75:17-25-76:1-14.

Gaps, Problems, and Facts about Darwin's Theory of Evolution.

- 784. There are multiple claims within the theory of evolution and they have different levels of evidentiary support. v. 19 (Behe); 10:14-25-13:1-21.
- 785. Proponents of Darwin's theory of evolution and opponents of intelligent design often conflate the evidence for the occurrence of evolution—change over time—with the evidence for the mechanism of evolution—natural selection. v. 19 (Behe); 13: 22-25-14:1-10.
- 786. Natural selection, which is viewed as the mechanism that Darwin proposed for evolution, is poorly tested and has very little evidence to support it. v. 19 (Behe); 18:9-14; 21:3-9.

- 787. The theory of evolution consists of several core propositions, including the observation that life has changed over time. v. 1 (Miller); 70:22-25-71:1-3; v. 19 (Behe); 11:20-25-12:1-12.
- 788. Intelligent design does not refute the proposition that life has changed over time. D 220 at 154-55; v. 19 (Behe); 18:22-25-19:1-15; D 300-N.
- 789. It is completely inaccurate to claim that intelligent design is "antievolution." v. 19 (Behe); 19:13-15; D 300-N.
- 790. Intelligent design does not directly speak to the concept of common descent; intelligent design looks to see if aspects of life exhibit a purposeful arrangement of parts as evidenced by their physical structure. It does not say how such a thing might have happened. v. 19 (Behe); 19:16-23; 20:13-19.
- 791. *Pandas* addresses common descent; some people point to empirical difficulties that they see for common descent, but common descent itself is neither a claim for or against intelligent design. v. 19 (Behe); 19:24-25-20:1-19.
- 792. Darwin's principle contribution to the theory of evolution was the mechanism of natural selection. v. 1 (Miller); 73:6-9. v. 15 (Alters); 28:11-12; 37:7-9; v. 17 (Padian); 60:23-25-61:1-17; v. 19 (Behe); 27:19-24.

- 793. There is genuine scientific debate within the scientific community regarding the mechanism of evolution. v. 14 (Alters); 107:25-108:1-7; v. 15 (Alters) 32:24-25-33: 1-12; 60:8-12.
- 794. Intelligent design focuses on natural selection—the mechanism of evolution. v. 19 (Behe); 20:20-25-21:1-2; 21:10-25-23:1-4.
- 795. Natural selection is principally the only mechanism of evolution. v. 19 (Behe);23:7-25-25:1-16.
- 796. Intelligent design proponents are not the only scientists to question the ability of natural selection to account for certain features of life. v. 19 (Behe); 25:17-25-26:1-17.
- 797. The greatest advances in biology in perhaps the last fifty years have come from molecular biology and looking at the molecular level and yet the theory of evolution played little if any part in this development. v. 37 (Minnich); 58:9-25-68:1-5; 87:17-25-94:1; D 257, D 251.
- 798. New information about molecular biology calls into question some of the previous assumptions about the theory of evolution. v. 37 (Minnich); 122:14-25-127:1-8; D 255.